

	<p>63.7333(f) of 40 <u>CFR</u> 63; and</p> <p>F. Maintain record of the monthly analysis for HAPs, if selected, in accordance with 63.7333(g) of 40 <u>CFR</u> 63.</p> <p>Reporting: The permittee shall submit semiannual reports as required under this subpart each year unless notified otherwise by this Department. The contents of the semiannual compliance report shall contain the contents in 63.7341 of 40 <u>CFR</u> 63.</p>	
9	<p><u>Department Required Annual Report Requirement</u></p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <p>A. The quantity in tons of coal charged to the batteries associated with this emissions unit; B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and C. The 12-month analysis for dissolved solids of the quench tower water.</p>	<p>2.1.3 18.5 18.7</p>

### Emissions Unit Operating Permit Summary

Emissions Unit No.: 019  
Company: Sloss Industries Corporation  
Source Description: North Coke Quenching Tower  
Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year  
Type and quantity of fuel used: None

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter	30.42 pounds per hour	Part 6.4
Total Dissolved Solids (TDS) or the Sum of the Concentration of benzene, benzo(a)pyrene, and naphthalene	TDS shall not exceed 1,100 milligrams per liter (mg/l) in water; or not to exceed the applicable site-specific limit approved by the permitting authority for benzene, benzo(a) pyrene, and naphthalene	Subpart CCCCC

Pollution Control Device: Baffles  
Continuous Emission Monitors: None  
Continuous Compliance Determiner: Equipment and Work Practice Standards  
Title V Monitoring: Weekly Testing of Quench Tower Water if TDS Content is Selected, or Monthly if Maintaining the Sum of the Concentrations of Benzene, Benzo(a)pyrene, and the Napthalene Used to Quench Hot Coke  
EPA Reference Test Methods: 9 of 40 CFR 60, Part 1.10, Method 160.1 of 40 CFR 136.3  
Reporting Requirements: Semi-Annual and Annual Inspection Results; See Condition Nos. 8 & 9  
Applicable Regulations: Section 1.5.15, Section 1.9.1, Part 1.10, Section 2.1.3, Part 6.1, Part 6.2, Part 6.4, Section 6.9.9, Part 18.5, Part 18.7, 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 019	Regulation
	<b>Section 1 – Applicability</b>	
1	<p><u>Applicability</u> The Emissions Unit, North Coke Quenching Tower, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including quenching towers and quench water. The emissions unit is subject to Section 6.9.9, entitled “Quenching,” of the Rules and Regulations:</p> <p>A. No person shall operate a coke oven plant without baffles installed and properly operating in the quench towers; and</p> <p>B. Water introduced to the quenching station must be of a quality approved by the Health Officer.</p> <p>The emissions unit is subject to Chapter 18 of the Rules and Regulations.</p>	<p>2.1.3 6.1 6.9.9 Chapter 18</p>
	<b>Section 2 -- Emission, Equipment or Production Requirements and Limitations</b>	
2	<p><u>Visible Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, “Visible Emissions Restrictions for Stationary Sources,” of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 1 calendar month of the observation.</p>	<p>2.1.3 6.1.1 18.5</p>
3	<p><u>Subpart CCCCCC—Required Limitations</u> For quenching of hot coke, the permittee shall meet the requirements in item A or B in this permit condition for quench water limitations:</p> <p>A. For the quenching of hot coke the concentration of total dissolved solids (TDS) in the water used for quenching must not exceed 1,100 milligrams per liter (mg/l); or</p> <p>B. The sum of the concentrations of benzene, benzo(a)pyrene, and naphthalene in the water used for quenching must not exceed the applicable site-specific limit approved by the permitting authority if this monitoring requirement is the compliance method selected by the permittee in lieu of item A hereinabove of this emissions unit.</p> <p>For quenching, the permittee shall use acceptable makeup water, as defined in Section 63.7352.</p>	<p>40 CFR 63, 63.7295 63.7352</p>
	<b>Section 3 -- Compliance and Performance Test Methods and Procedures</b>	Regulation
4	<p><u>Test Methods and Procedures</u> Every month, the permittee shall perform an analysis for suspended solids of the water to the quench tower. The samples shall be taken after the makeup water has been mixed with the water recycled from the sump and the analysis shall be done in accordance with the <u>Standard Methods for the Examination of Water and Wastewater</u>.</p>	<p>1.9.1 1.10 2.1.3</p>

5	<p><u>Subpart CCCCC—Test Methods</u></p> <p>TDS Water Analysis:</p> <p>If the permittee elects the TDS limit for quench water, 63.7295(a)(1)(i) of 40 <u>CFR</u> 63, the permittee shall conduct each performance test that applies to the affected source according to the conditions as follows:</p> <p>A. Take the quench water sample from a location that provides a representative sample of the quench water as applied to the coke. The samples shall be taken after the makeup water has been mixed with the water recycled from the sump and the analysis shall be done in accordance with the <u>Standard Methods for the Examination of Water and Wastewater</u>. The permittee shall use acceptable makeup water, as defined in Section 63.7352 of the subpart.</p> <p>B. Determine the TDS concentration of the sample using Method 160.1 in 40 <u>CFR</u> Part 136.3. In lieu of drying the total filterable residue as prescribe in Method 160.1 at 180 degrees Centigrade, dry the total filterable residue between 103 to 105 degrees Centigrade.</p> <p>Benzene, benzo(a)pyrene, and naphthalene Water Analysis:</p> <p>C. If at any time the permittee elects to meet the alternate requirements, for quench water in 63.7295(a)(1)(ii) of 40 <u>CFR</u> 63, the permittee must establish a site-specific constituent limit according to the procedures in 63.7325 (b)(1) through (4), of 40 <u>CFR</u> 63. The permittee shall use acceptable makeup water, as defined in Section 63.7352 of the subpart.</p> <p>I. If at any time the permittee elects to meet the Benzene, benzo(a)pyrene, and naphthalene water analysis in item C of this condition unit, the permittee shall establish a site-specific constituent limit according to the following procedures:</p> <p>a. Take a minimum of nine quench water samples from a location that provides a representative sample of the quench water as applied to the coke (e.g., from the header that feeds water to the quench tower reservoir). Conduct sampling under normal and representative operating conditions.</p> <p>b. For each sample, determine the TDS (Total Dissolved Solids) concentration according to the requirements in item B of this condition unit, and the concentration of benzene, benzo(a)pyrene, and naphthalene using the applicable methods in 40 <u>CFR</u> 136 or an approved alternative method.</p> <p>c. Determine and record the highest sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in any sample that has a TDS concentration less than or equal to the TDS limit of 1,100 milligrams per liter (mg/l). This concentration is the site-specific constituent limit.</p> <p>d. Submit the site-specific limit, sampling results, and all supporting data and calculations to your permitting authority for review or and approval.</p>	40 <u>CFR</u> 63, 63.7295, 63.7325, 63.7352
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<b>Section 4 – Emissions Monitoring</b>		
6	<p><u>Subpart CCCCC—Monitoring</u></p> <p>Beginning on the first day that compliance is required under 63.7283 of 40 <u>CFR</u> 63, and subsequent, the permittee shall demonstrate continuous compliance with the TDS limit for quenching in 63.7295(a)(1)(i) or 63.7295(a)(1)(ii) of 40 <u>CFR</u> 63, by meeting the following requirements:</p> <p>A. Maintaining the TDS content of the water used to quench the hot coke at 1,100 mg/l or less; and</p> <p>Determining the TDS content of the quench water at least weekly according to the requirements in 63.7325(a) of 40 <u>CFR</u> 63, and recording the sample results; or</p> <p>B. Demonstrate continuous compliance with the constituent limit for quenching in 63.7295(a)(1)(ii) of 40 <u>CFR</u> 63, by the following requirement:</p> <p>Maintaining the sum of the concentration of benzene, benzo(a)pyrene, and naphthalene in water used to quench hot coke at levels less than or equal to the site-specific limit approved by the permitting authority; and determining the sum of the constituent concentrations at least monthly according to the requirements in 63.7325(c) of 40 <u>CFR</u> 63, and recording the sample results.</p>	<p>40 <u>CFR</u> 63 63.7283 63.7295 63.7325 63.7333</p>
<b>Section 5—Work Practice Standards</b>		
7	<p><u>Subpart CCCCC—Work Practice Standards</u></p> <p>For each quench tower the permittee shall meet the following requirements:</p> <p>A. The permittee must equip each quench tower with baffles such that no more than 5% of the cross sectional area of the tower may be uncovered or open to the sky;</p> <p>B. The baffles in each quench tower shall be washed once per day that the tower is used to quench coke, except as follows:</p> <ol style="list-style-type: none"> <li>1. The baffles are not required to be washed in a quench tower if the highest measured ambient temperature remains less than 30 degrees Fahrenheit throughout that day;</li> <li>2. Continuously record the ambient temperature on days that the baffles were not washed;</li> <li>3. The quench towers shall be inspected monthly for damaged or missing baffles and blockage;</li> <li>4. The permittee shall initiate repair or replacement of damaged or missing baffles within 30 days and complete as soon as practicable; and</li> <li>5. The permittee, as provided in 63.6(g) of 40 <u>CFR</u> 63, may request an alternate work practice standard.</li> </ol>	<p>40 <u>CFR</u> 63 63.6(g) 63.7295</p>
<b>Section 6 -- Recordkeeping and Reporting Requirements</b>		
8	<p><u>Subpart CCCCC--Reporting Dissolved Solids or HAP Constituents</u></p> <p>Records:</p> <p>A. The permittee shall maintain records of baffle inspections as required in Paragraph 63.7295(b)(1) of 40 <u>CFR</u> 63;</p> <p>B. Maintain records that document conformance with the washing, inspection, and repair requirements in 63.7295(b)(2) OF 40 cfr 63, including records of the ambient temperature on any day that the baffles were not washed;</p> <p>C. Maintain records of the source of makeup water to document conformance with the requirements for acceptable makeup water in 63.7295(a)(2) of 40 <u>CFR</u> 63;</p> <p>D. Maintain records of the weekly analysis for TDS, if selected, in accordance with</p>	<p>1.5.15 2.1.3 18.5.3 40 <u>CFR</u> 63 63.7295 63.7333 63.7341</p>

	<p>63.7333(f) of 40 <u>CFR</u> 63; and</p> <p>F. Maintain record of the monthly analysis for HAPs, if selected, in accordance with 63.7333(g) of 40 <u>CFR</u> 63.</p> <p>Reporting: The permittee shall submit semiannual reports as required under this subpart each year unless notified otherwise by this Department. The contents of the semiannual compliance report shall contain the contents in 63.7341 of 40 <u>CFR</u> 63.</p>	
9	<p><u>Department Required Annual Report Requirement</u></p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <p>A. The quantity in tons of coal charged to the batteries associated with this emissions unit;</p> <p>B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and</p> <p>C. The 12-month analysis for dissolved solids of the quench tower water.</p>	<p>2.1.3 18.5 18.7 40 <u>CFR</u> 63</p>

### Emissions Unit Operating Permit Summary

Emissions Unit No.: 021  
Company: Sloss Industries Corporation  
Source Description: Coke Pushing Operations of Coke Battery Nos. 3, 4, and 5  
Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year  
Type and quantity of fuel used: N/A

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standards
Visible Emissions (VE)	20% Opacity	Part 6.1
Visible Emissions (VE)	40% Opacity	Section 6.9.4
Particulate Matter (PM)	0.02 pounds per ton of coke (lb/ton)	Subpart CCCCC

Pollution Control Device: Baghouse  
Continuous Emission Monitors: None  
EPA Reference Test Methods: Method 1, 2, 2F, 2G, 3, 3A, 3B, 4, 5, 5D, 9 of Appendix A (40 CFR 60)  
Reporting Requirements: See Section 6, & Permit Condition 9  
Applicable Regulations: Section 1.5.15, Section 2.1.3, Part 6.1, Part 6.2, Part 6.4, Part 6.9, Part 18.5, Section 18.5.3, 40 CFR 60, 40 CFR 63

No.	Permit Conditions for Emissions Unit No. 021	Regulation
	<b>Section 1 – Applicability</b>	
1	<p><u>Applicability</u> <u>Visible Emissions Restriction</u></p> <p>The Emissions Unit No. 021 including the push control system (hooding, ductwork, and hotcar) with baghouse permitted herein is subject to and shall comply with the requirements under Section 6.9.4, "Pushing" of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere visible emissions during the pushing cycle, other than water mist or vapor, to exceed 40% for more than 1 push per hour per battery or for more than 2 consecutive pushes from the same oven. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 <u>CFR</u> 60, July 1, 2008, as the same may be amended or revised. Individual readings, however, will be instantaneous as opposed to 6-min averages per Method 9. To comply with Title V monitoring requirements, the permittee shall perform a visual observation of the emission units (Batteries No's. 3, 4, &amp; 5) once per month. If any visible emissions (greater than 40% opacity) are observed, the permittee shall immediately correct the problem causing the emission unit to emit visible emissions and make a record of the event and correct actions. Within 24 hours of the completion of corrective actions, the permittee shall again observe the emission unit. If visible emissions are present, a certified observer shall complete an EPA Method 9 Visible Emissions Evaluation within 3 business days to establish compliance with the above opacity limitation. The date, time, and type of corrective action initiated to eliminate the visible emissions and the date and time the corrective actions were completed shall be provided in the same record that contained the initial observation.</p>	<p>6.9.4 18.5 40 <u>CFR</u> 60 Appendix A</p>
2	<p><u>General Compliance Requirements</u></p> <p>The permittee shall be in compliance with the emissions limitations, work practice standards, and operation and maintenance requirements in this subpart at all times, except during periods of startup, shutdown, and malfunction as defined in 63.2 of 40 <u>CFR</u> 63.</p>	<p>40 <u>CFR</u> 63, 63.2 Chapter 18</p>
3	<p><u>Startup, Shutdown, and Malfunction Plan</u></p> <p>The permittee shall develop and implement a written startup, shutdown, and malfunction plan according to the provisions of 63.6(e)(3) of 40 <u>CFR</u> 63.</p>	<p>40 <u>CFR</u> 63, 63.6(e)(3) Chapter 18</p>
4	<p><u>Subpart CCCCC</u></p> <p>The Emissions Unit No. 021 herein is subject to the requirements as listed in Subpart CCCCC (National Emissions Standards for Hazardous Air Pollutants for Coke Ovens) of Part 63 of Title 40 of the <u>Code of Federal Regulations</u>.</p>	<p>40 <u>CFR</u> 63 Chapter 18</p>
	<b>Section 2 – Emission, Equipment, Production Requirements, Limitations and Work Practice Standards</b>	
5	<p><u>Subpart CCCCC - Emissions Limitation – PM</u></p> <p>The permittee shall not discharge to the atmosphere particulate matter from a control device applied to pushing emissions that exceed 0.02 pounds per ton (lb/ton) of coke if a movable hood vented to a stationary control device is used to capture emissions.</p>	<p>40 <u>CFR</u> 63, 63.7290 Chapter 18</p>
6	<p><u>Subpart CCCCC – Operating Limit</u></p> <p>For each capture system applied to pushing emissions:</p> <p>A. Maintain the daily average volumetric flowrate at the inlet of the control device at or above the minimum level during the initial performance test, or</p> <p>B. For each capture system that uses an electric motor to drive the fan, the permittee must maintain the daily average fan motor amperes at or above the minimum level established during the initial performance test</p>	<p>40 <u>CFR</u> 63, 63.7290 Chapter 18</p>



7	<p><u>Subpart CCCCC – Work Practice Standards</u></p> <p>The following requirements are to be met for coke oven batteries with vertical flues:</p> <p>A. Observe and record the opacity of fugitive pushing emissions from each oven at least once every 90 days. If an oven cannot be observed during a 90-day period due to circumstances that were not reasonably avoidable, the permittee must observe the opacity of the first push of that oven following the close of the 90-day period that is capable of being observed in accordance with the procedures in 63.7334(a) of 40 <u>CFR</u> 63, and it must document why the oven was not observed within the 90-day period. All opacity observations of fugitive pushing emissions for batteries with vertical flues must be made using the procedures in 63.7334(a) of 40 <u>CFR</u> 63.</p> <p>B. For Batteries 3 &amp; 4: If 2 or more batteries are served by the same pushing equipment and total no more than 90 ovens, the batteries as a unit can be considered a single battery.</p> <p>C. The permittee shall observe and record the opacity of fugitive pushing emissions for at least 4 consecutive pushes per battery each day. Exclude any push during which the observer's view is obstructed or obscured by interferences and observe the next available push to complete the set of 4 pushes. The permittee may observe fewer than 4 consecutive pushes, if the observance was reasonably unavoidable; however, the permittee must observe and record as many consecutive pushes as possible and document why 4 consecutive pushes could not be observed. The permittee may observe and record 1 or more non-consecutive pushes in addition to any consecutive pushes observed in a day.</p> <p>D. The permittee shall not alter the pushing schedule to change the sequence of consecutive pushes to be observed on any day. Records are to be maintained indicating legitimate operational reason(s) for any change in the pushing schedule which results in a change in the sequence of consecutive pushes observed in a day.</p>	<p>40 <u>CFR</u> 63, 63.7291, 63.7334(a) Chapter 18</p>
8	<p><u>Subpart CCCCC – Fugitive Pushing Emissions; Corrective Action/Increase Coking Time</u></p> <p>A. In doing pushing observances, if the average opacity for any individual push exceeds 30% opacity for any short battery (less than 5 meters in height) or 35% opacity for any tall battery, the permittee shall take corrective action and/or increase the coking time for that oven.</p> <p>B. If corrective action or an increase in coking time is required, completing this action or the increase in coking time must occur within 10 calendar days or the number of days determined using Equation 1 under 63.7291, of 40 <u>CFR</u> 63 whichever is greater:</p> $X = 0.55 * Y \quad (\text{Eq. 1})$ <p>Where:</p> <p>X = Number of calendar days allowed to complete corrective action or increase coking time; and</p> <p>Y = Current coking time for the oven, hours.</p> <p>For the purpose of determining the number of calendar days allowed under Equation 1 of this section, day one is the first day following the day you observed an opacity in excess of 30 percent for any short battery or 35 percent for any tall battery. Any fraction produced by Equation 1 of this section must be counted as a whole day. Days during which the oven is removed from service are not included in the number of days allowed to complete corrective action.</p> <p>C. Procedures for time periods, days that oven(s) are removed from service, and</p>	<p>40 <u>CFR</u> 63, 63.7291 Chapter 18</p>

	<p>demonstration that the corrective action and/or increased coking time was successful or unsuccessful are contained in 63.7291(a)(5) of 40 <u>CFR</u> 63, and 63.7291(6)(i) of 40 <u>CFR</u> 63. If the corrective action/or increased coking was successful, the permittee may return the oven to the 90-day reading rotation described in 63.7291(a)(1) of 40 <u>CFR</u> 63.</p> <p>D. If the initial corrective action/or increased coking time under 63.7291(6)(i) of 40 <u>CFR</u> 63, were unsuccessful, the permittee must complete additional corrective action and/or increased coking time for that oven within the number of days allowed in 63.7291(a)(5) of 40 <u>CFR</u> 63.</p> <p>E. After implementing any additional corrective action/or increased coking time required under 63.7291(a)(6)(i) or (a)(7)(ii) of 40 <u>CFR</u> 63, the permittee shall demonstrate that corrective action/or increased coking time was successful. If the corrective action and/or increased coking time was successful, the permittee may return the oven to the 90-day reading rotation describe in 63.7291(a)(1) of 40 <u>CFR</u> 63.</p> <p>F. If the corrective action and/or increased coking time was unsuccessful, the permittee must repeat the procedures in 63.7291(a)(6)(i) of 40 <u>CFR</u> 63, until the corrective action and/or increased coking time is successful.</p> <p>G. If at any time the permittee places an oven on an increased coking time as a result of fugitive emissions exceeding 30% for a short battery or 35% for a tall battery, the permittee shall keep the oven on the increased coking time until the oven qualifies for decreased coking time using the procedures in paragraph 63.7291(a)(7)(ii) or (a)(7)(iii) of 40 <u>CFR</u> 63.</p>	
9	<p><u>Subpart CCCCC – Fugitive Pushing Emissions; Deviations – Reporting Requirements</u></p> <p>A. When the permittee's oven(s) fails to meet the standard (extended coking time) average opacity for any individual push that exceeds 30% opacity for any short battery or 35% opacity for any tall battery, the permittee shall report to the permitting authority as a deviation each unsuccessful attempt at corrective action and/or increased coking time under 63.7921(a)(6)(ii) of 40 <u>CFR</u> 63.</p> <p>B. When the permittee's oven(s) fails to meet the standard (decreased coking time) average opacity for any individual push that exceeds 30% opacity for any short battery or 35% opacity for any tall battery, the permittee shall report to the permitting authority as a deviation (63.7921(a)(7)(iv) of 40 <u>CFR</u> 63), the second and any subsequent consecutive unsuccessful attempts on the same oven to qualify for decreased coking time as described in paragraph 63.7921(a)(7)(iii).</p>	<p>40 <u>CFR</u> 63, 63.7291(a)(6)(iii), 63.7921(a)(7)(i) and (a)(7)(ii) Chapter 18</p>
10	<p><u>Subpart CCCCC – Work Practice Standards – Soaking</u></p> <p>A. Each coke by-product battery is subject to a work practice standard(s) for soaking in accordance with 63.7294 of 40 <u>CFR</u> 63, and each plan must include measures and procedures to:</p> <ol style="list-style-type: none"> <li>1. Train topside workers to identify soaking emissions that require corrective action;</li> <li>2. Damper the oven off the collecting main prior to opening the standpipe cap;</li> <li>3. Determine the cause of soaking emissions that do not ignite automatically, including emissions from raw COG leaking from the collecting main through the damper, and emissions from incomplete coking;</li> <li>4. If soaking emissions are caused by leaks from the collecting main, take corrective actions to eliminate the soaking emissions. Suggested methods for corrective actions are contained in 63.7294(a)(4) of 40 <u>CFR</u> 63; and</li> </ol>	<p>40 <u>CFR</u> 63, 63.7294 63.6(g)</p>

	<p>5. If soaking emissions are not caused by leaks from the collecting main, notify the designated responsible party. If incomplete coking is the cause of the emissions, the permittee must put the oven back on the collecting main until it is completely coked or the permittee must ignite the emissions.</p> <p>6. As provided in §63.6(g), you may request to use an alternative to the work practice standard in paragraph (a) of this section.</p>	
	<b>Section 3 -- Compliance and Performance Test Methods and Procedures</b>	
11	<p><u>Stack Testing</u></p> <p>For each control device subject to an emissions limit for particulate matter in Paragraph 63.7290(a) of 40 <u>CFR</u> 63, the permittee shall conduct subsequent performance tests no less frequently than twice (at mid-term and renewal) during each term of the Title V operation permit.</p>	40 <u>CFR</u> 63, 63.7322 Chapter 18
12	<p><u>Stack Test Procedures—Subpart CCCCC</u></p> <p>The test methods and other procedures for each performance test shall be conducted in accordance with Section 63.7322.</p>	40 <u>CFR</u> 63 40 <u>CFR</u> 60, Appendix A
	<b>Section 4—Operation and Maintenance Requirements</b>	
13	<p><u>Good Engineering Practices &amp; Minimize Emissions to the Level of Subpart CCCCC</u></p> <p>A. As required by 63.6(e)(1)(i) of 40 <u>CFR</u> 63, the permittee shall operate and maintain the affected source (batteries), including the air pollution control and monitoring equipment, in a manner consistent with good air pollution control practices for minimizing emissions at least to the levels required by this subpart.</p> <p>1. The permittee must prepare and operate at all times according to a written operating and maintenance plan for the general operation and maintenance of the existing by-product coke oven batteries. Each plan associated with pushing must address the following as a minimum:</p> <ol style="list-style-type: none"> <li>Frequency and method of recording underfire gas parameters;</li> <li>Frequency and method of recording battery operating temperature, including measurement of individual flue and cross-wall temperatures;</li> <li>Procedures to prevent pushing an oven before it is fully coked;</li> <li>Procedures to prevent overcharging and undercharging of ovens, including measurement of coal moisture, coal bulk density, and procedures for determining volume of coal charged;</li> <li>Frequency and procedures for inspecting flues, burners, and nozzles;</li> <li>The operating and maintenance plan must include requirements to repair any defects or deficiencies brought on through inspections as describe in permit condition 15 of this emissions unit. Repairs are to be made before the next schedule inspection, and</li> <li>For each baghouse applied to pushing emissions, the permittee shall install, operate, and maintain each bag leak detection system according to 63.7331 of 40 <u>CFR</u> 63.</li> </ol>	40 <u>CFR</u> 63, 63.7300, 63.7331 Chapter 18

14	<p><u>Subpart CCCCC-Continuous Compliance with the Operation and Maintenance Requirements</u></p> <p>A. For each by-product coke oven battery, the permittee shall demonstrate continuous compliance with the operation and maintenance requirements in 63.7300(b) by adhering at all times to the plan requirements and recording all information needed to document conformance.</p> <p>B. For each coke oven battery with a capture system or control device applied to pushing emissions, the permittee shall demonstrate continuous compliance with the operation and maintenance requirements in 63.7300(c) by meeting the following three (3) requirements:</p> <ol style="list-style-type: none"> <li>1. Making monthly inspections of capture systems according to 63.7300(c)(1) and recording all information needed to document conformance with these requirements;</li> <li>2. Performing preventative maintenance for each control device according to 63.7300(c)(2) and recording all information needed to document conformance with these requirements; and</li> <li>3. Initiating and completing corrective action for a bag leak detection system alarm according to 63.7300(c)(3) and recording all information needed to document conformance with these requirements. This includes records of the times the bag leak detection system alarm sounds, and for each valid alarm, the time you initiated corrective action, the corrective action(s) taken, and the date on which corrective action is completed.</li> </ol> <p>C. To demonstrate continuous compliance with the operation and maintenance requirements for a baghouse applied to pushing emissions from a coke oven battery in 63.7331(a), the permittee shall inspect and maintain each baghouse according to the requirements in 63.7331(a)(1) through (8) and record all information needed to document conformance with these requirements. If the permittee increase or decrease the sensitivity of the bag leak detection system beyond the limits specified in 63.7331(a)(6), the permittee shall include a copy of the required written certification by a responsible official in the next semiannual compliance report.</p> <p>D. The permittee shall maintain a current copy of the operation and maintenance plans required in 63.7300(b) and (c) onsite and available for inspection upon request. The permittee shall keep the plans for the life of the affected source or until the affected source is no longer subject to the requirements of this subpart.</p>	40 <u>CFR</u> 63, 63.7300, 63.7331, 63.7335
	<p><b><u>Section 5 – Continuous Emission Monitoring</u></b></p> <p>15 <u>Continuous Compliance Requirements—Monitoring</u></p> <p>For each baghouse applied to pushing emissions from a coke oven battery, the permittee shall continuously monitor the relative change in particulate matter loading using a bag leak detection system according to requirements in 63.7331(a) of 40 <u>CFR</u> 63, and conduct inspections at their specified frequency according to the requirements as follows:</p> <ol style="list-style-type: none"> <li>1. Monitor the pressure drop across each baghouse cell each day to ensure the pressure drop is within the normal operating range;</li> <li>2. Confirm that dust is being removed from the hoppers through weekly visual inspections or equivalent methods of assurance;</li> <li>3. Check the compressed air supply for pulse-jet baghouses each day;</li> <li>4. Monitor cleaning cycles;</li> <li>5. Check bag cleaning mechanisms for proper functioning through monthly visual inspection or equivalent means;</li> </ol>	40 <u>CFR</u> 63, 63.7330, 63.7331 Chapter 18

	<p>6. Confirm the physical integrity of the baghouse through quarterly visual inspections of the baghouse interior for air leaks;</p> <p>7. Inspect fans for wear;</p> <p>8. If the permittee elects the operating limit in 63.7290(b)(3)(i) of 40 <u>CFR</u> 63, for a capture system applied to pushing emissions, the permittee shall install, operate, and maintain a device to measure fan motor amperage. Refer to 63.7331(h) of 40 <u>CFR</u> 63, for this requirement; and</p> <p>9. If the permittee elects the operating limit in 63.7290(b)(3)(ii) of 40 <u>CFR</u> 63, for a capture system applied to pushing emissions, the permittee shall install, operate, and maintain a device to measure the daily average static pressure.</p> <p>10. For each baghouse applied to pushing emissions, the permittee shall install, operate, and maintain each bag leak detection system according to 63.7331 of 40 <u>CFR</u> 63.</p>	
16	<p><u>Push Control System—Inspections and Preventive Maintenance</u></p> <p>A. The permittee shall prepare and operate at all times according to a written operating and maintenance plan for each capture system and control device applied to pushing emissions. Each plan must address at a minimum the following elements:</p> <ol style="list-style-type: none"> <li>1. Monthly inspections of the equipment that are important to the performance of the total capture system (e.g., pressure sensors, dampers, and damper switches) These inspections must include observations of the physical appearance of the equipment (e.g., holes in ductwork or hoods, flow restrictions such as dents and soot bridging, and fan erosion);</li> <li>2. Preventive maintenance for each control device, including a preventive maintenance schedule; and</li> <li>3. Corrective action for all baghouses applied to pushing emissions. In the event a bag leak detection system alarm is triggered, the permittee must initiate corrective action to determine the cause of the alarm within 1 hour of the alarm, initiate corrective action to correct the problem within 24 hours of the alarm, and complete the corrective action as soon as practicable.</li> </ol>	<p>40 <u>CFR</u> 63, 63.7300 Chapter 18</p>
	<b>Section 6 – Recordkeeping and Reporting Requirements</b>	
17	<p><u>Department Required Annual Report Requirement</u></p> <p>The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein:</p> <p>A. The actual hours of operation;</p> <p>B. For each battery, the total quantity in tons of coal charged, coke produced. Specify amounts in tons for both furnace and foundry; and</p> <p>C. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations.</p>	<p>1.5.15 2.1.3 18.5.3</p>
18	<p><u>Subpart CCCCC—Reporting Requirements</u></p> <p>The permittee shall submit semiannual compliance reports each year unless notified otherwise.</p> <p>Each compliance report must provide information on compliance with the emissions limitations, work practice standards, and operation and maintenance requirements for all affected sources. Reporting shall be in accordance with 63.7341 of 40 <u>CFR</u> 63.</p>	<p>40 <u>CFR</u> 63 Chapter 18</p>

19	<p><u>Subpart CCCCC—Recordkeeping</u></p> <p>The permittee shall keep records in accordance with the following:</p> <ul style="list-style-type: none"><li>A. A copy of each notification and report that the permittee submitted to comply with the subpart, including all documentation supporting any initial notification of compliance status that was submitted by the permittee, and according to the requirements in 63.10(b)(2)(xiv) of 40 <u>CFR</u> 63;</li><li>B. The records in 63.6(e)(3)(iii) through (v) of 40 <u>CFR</u> 63, related to startup, shutdown, and malfunction;</li><li>C. Records of performance tests, performance evaluations, and opacity observations as required in 63.10(b)(2)(viii) of 40 <u>CFR</u> 63;</li><li>D. The permittee shall keep records in 63.6(h)(6) of 40 <u>CFR</u> 63, for visual observations; and</li><li>E. The permittee shall keep records required in 63.7333 through 63.7335 of 40 <u>CFR</u> 63, to show continuous compliance with each emissions limitation, work practice standard, and operation and maintenance requirement that applies.</li></ul>	40 <u>CFR</u> 63, 63.7342 Chapter 18
20	<p><u>Subpart CCCCC—Record Retention</u></p> <p>The permittee shall keep records in a form suitable and readily available for expeditious review, according to 63.10(b)(1) . of 40 <u>CFR</u> 63.</p> <p>As specified in 63.10(b)(1) of 40 <u>CFR</u> 63, the permittee shall keep each record for 5 years following the date of each occurrence, measurement, maintenance, corrective action, report or record.</p> <p>The permittee shall keep each record onsite for a least 2 years after the date of each occurrence, measurement, maintenance, corrective action, report, or record in accordance with 63.10(b)(1) of 40 <u>CFR</u> 63. The permittee can keep the records offsite for the remaining 3 years.</p>	40 <u>CFR</u> 63, 63.7343 Chapter 18

### Emissions Unit Operating Permit Summary

Emissions Unit No.: 029

Company: Sloss Industries Corporation

Source Description: 238 MMBTU per Hour of Heat Input Capacity Steam Boiler, Babcock-Wilcox Model FH-29-21'0"/17 LH-54 Designated Steam Generator No. 1

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:  
Primary: Coke Oven Gas – 5,808.47 million cubic feet restricted  
Secondary: Natural Gas

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	0.124 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Sulfur Dioxide (SO <sub>2</sub> )	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA
Carbon Monoxide (CO)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner: Daily Recordkeeping of Fuel Combusted  
Maximum Heat Input Restricted to 238 MMBTU/hour  
Coke Oven Gas Restricted to 5,808.47 MMCF/year for Boilers 1, 3, & 4  
Online  
Restricted to Coke Oven Gas/Natural Gas Combustion

Title V Monitoring: Monthly Visible Emissions Observation of Boiler Stack  
Daily Fuel Combustion Metering ( $\pm 1$  % accuracy)  
Monthly Sampling & Testing of Fuel Sulfur Content (COG)  
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: Permit Condition Nos. 3 & 9

Applicable Regulations: Sections 2.1.3, 6.1.1 and 7.1.1  
Parts 6.3 and 18.5  
Chapters 2, 6, 7, 16 and 18

No.	Permit Conditions for Emissions Unit No. 029	Regulation
	<b>Section 1 – Applicability</b>	
1	<p><u>Applicability</u></p> <p>The Emissions Unit, 238 MMBTU/hour boiler, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled “Visible Emissions,” of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled “Fuel Burning Equipment,” of the Rules and Regulations. The emissions unit is subject to Part 7.1, entitled “Fuel Combustion,” of the Rules and Regulations. The emissions unit is subject to Chapter 18 of the Rules and Regulations.</p>	<p>2.1.3 6.1 6.3 7.1 Chapter 18</p>
	<b>Section 2 -- Emission, Equipment or Production Requirements and Limitations</b>	
2	<p><u>Visible Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, “Visible Emissions Restrictions for Stationary Sources,” of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions (greater than 20% opacity) are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 48 hours of the observation. If this boiler is on reserve standby during the month that a visible emissions observation is required, the permittee shall document in its monthly records that a visible emissions observation was not performed and why it was not performed.</p>	<p>2.1.3 6.1.1 18.5</p>
3	<p><u>Particulate Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled “Fuel Burning Equipment,” of the Rules and Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.124 pounds per million BTU of heat input (at 238 MMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only coke oven gas and natural gas is combusted in the emissions unit. This written certification shall be submitted biennially.</p>	<p>2.1.3 6.3 18.5</p>
4	<p><u>Sulfur Oxides Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 CFR 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze the coke oven gas for sulfur content by weight. The permittee shall also determine the heat content of the coke oven gas sampled. The emissions unit is restricted to combusting coke oven gas and natural gas.</p>	<p>2.1.3 7.1.1 18.5</p>



5	<u>Combustion Fuel Restriction</u> The Emissions Unit permitted herein is restricted to combusting coke oven gas/natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount ( $\pm 1\%$ accuracy) of each fuel combusted each calendar day.	2.1.3 18.5
6	<u>Heat Input Restriction</u> The Emissions Unit permitted herein shall not exceed 238,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts, within the fuel limits as shown in permit condition 5, of this emissions unit for fuel combusted and time operated each calendar day.	2.1.3 18.5
7	<u>New Source Review Combustion Fuel Restriction</u> The permittee shall not cause or allow the Emissions Unit No. 029 (Steam Generator No. 1) permitted herein in operation with Emissions Units 31 & 32 to exceed 5808.47 million (MM) cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations.	2.1.3 18.5
<b>Section 3 -- Compliance and Performance Test Methods and Procedures</b>		Regulation
8	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 <u>CFR</u> 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7C: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions Tutwiler Method: Sulfur Content (H <sub>2</sub> S, hydrogen sulfide) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	2.1.3 40 <u>CFR</u> 60
<b>Section 4 -- Continuous Emission Monitoring -- Not Applicable</b>		
<b>Section 5 -- Recordkeeping and Reporting Requirements</b>		
9	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation. The record of operational hours shall differentiate combusting coke oven gas and natural gas. B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations, C. The quantity of coke oven gas and natural gas burned in million cubic feet, and D. The average monthly total sulfur content and heat content of the coke oven gas.	1.5.15 2.1.3 18.5.3

### Emissions Unit Operating Permit Summary

Emissions Unit No.: 031

Company: Sloss Industries Corporation

Source Description: 238 MMBTU per Hour of Heat Input Capacity Steam Boiler. Babcock-Wilcox Model FH-29-21'0"/17 LH-54 Designated Steam Generator No. 3

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:  
Primary: Coke Oven Gas – 5,808.47 million cubic feet restricted  
Secondary: Natural Gas

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	0.124 lbs/MMBTU of Heat Input (Max. Capacity)	Part 6.3
Sulfur Dioxide (SO <sub>2</sub> )	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Nitrogen Oxides (NO <sub>x</sub> )	NA	NA
Carbon Monoxide (CO)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner: Daily Recordkeeping of Fuel Combusted  
Maximum Heat Input Restricted to 238 MMBTU/hour  
Coke Oven Gas Restricted to 5,808.47 MMCF/year for Boilers 1, 3, & 4  
Online  
Restricted to Coke Oven Gas/Natural Gas Combustion

Title V Monitoring: Monthly Visible Emissions Observation of Boiler Stack  
Daily Fuel Combustion Metering ( $\pm 1$  % accuracy)  
Monthly Sampling & Testing of Fuel Sulfur Content (COG)  
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: Permit Condition Nos. 3 & 9

Applicable Regulations: Sections 2.1.3, 6.1.1 and 7.1.1  
Parts 6.3 and 18.5  
Chapters 2, 6, 7, 16 and 18

No.	Permit Conditions for Emissions Unit No. 031	Regulation
	<b>Section 1 -- Applicability</b>	
1	<p><u>Applicability</u></p> <p>The Emissions Unit, 238 MMBTU/hour boiler, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled "Visible Emissions," of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The emissions unit is subject to Part 7.1, entitled "Fuel Combustion," of the Rules and Regulations. The emissions unit is subject to Chapter 18 of the Rules and Regulations.</p>	<p>2.1.3 6.1 6.3 7.1 Chapter 18</p>
	<b>Section 2 -- Emission, Equipment or Production Requirements and Limitations</b>	
2	<p><u>Visible Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, "Visible Emissions Restrictions for Stationary Sources," of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 <u>CFR</u> 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions (greater than 20% opacity) are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 48 hours of the observation. If this boiler is on reserve standby during the month that a visible emissions observation is required, the permittee shall document in its monthly records that a visible emissions observation was not performed and why it was not performed.</p>	<p>2.1.3 6.1.1 18.5</p>
3	<p><u>Particulate Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the particulate emission rate restriction that is allowed under Part 6.3, entitled "Fuel Burning Equipment," of the Rules and Regulations. The permittee shall not cause or allow the emissions of particulate matter from the fuel-burning equipment permitted herein in excess of 0.124 pounds per million BTU of heat input (at 238 MMBTU/hr) as determined by EPA Reference Method 5 of Appendix A of 40 <u>CFR</u> 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only coke oven gas and natural gas is combusted in the emissions unit. This written certification shall be submitted biennially.</p>	<p>2.1.3 6.3 18.5</p>
4	<p><u>Sulfur Oxides Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 <u>CFR</u> 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze the coke oven gas for sulfur content by weight. The permittee shall also determine the heat content of the coke oven gas sampled. The emissions unit is restricted to combusting coke oven gas and natural gas.</p>	<p>2.1.3 7.1.1 18.5</p>

5	<u>Combustion Fuel Restriction</u> The Emissions Unit permitted herein is restricted to combusting coke oven gas/natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount ( $\pm 1\%$ accuracy) of each fuel combusted each calendar day.	2.1.3 18.5
6	<u>Heat Input Restriction</u> The Emissions Unit permitted herein shall not exceed 238,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts, within the fuel limits as shown in permit condition 5, of this emissions unit for fuel combusted and time operated each calendar day.	2.1.3 18.5
7	<u>New Source Review Combustion Fuel Restriction</u> The permittee shall not cause or allow the Emissions Unit No. 031 (Steam Generator No. 1) permitted herein in operation with Emissions Units 29 & 32 to exceed 5808.47 million (MM) cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations.	2.1.3 18.5
<b>Section 3 -- Compliance and Performance Test Methods and Procedures</b>		
8	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 <u>CFR</u> 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7C: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions Tutwiler Method: Sulfur Content (H <sub>2</sub> S, hydrogen sulfide) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	2.1.3 40 <u>CFR</u> 60
<b>Section 4 -- Continuous Emission Monitoring -- Not Applicable</b>		
<b>Section 5 -- Recordkeeping and Reporting Requirements</b>		
9	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation. The record of operational hours shall differentiate combusting coke oven gas and natural gas. B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations, C. The quantity of coke oven gas and natural gas burned in million cubic feet, and D. The average monthly total sulfur content and heat content of the coke oven gas.	1.5.15 2.1.3 18.5.3

### Emissions Unit Operating Permit Summary

Emissions Unit No.: 032

Company: Sloss Industries Corporation

Source Description: 200 MMBTU per Hour of Heat Input Capacity Steam Boiler, Babcock-Wilcox Model FH-29-21'0"/17 LH-54. Subject to NSPS Requirements under Subpart Db of 40 CFR 60.40b Designated Steam Generator No. 4

Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:

Primary: Coke Oven Gas – 5,808.47 million cubic feet Restricted

Secondary: Natural Gas

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Opacity	20 % Opacity	NSPS – Subpart Db
Particulate Matter (PM)	25.2 pounds/hour	Section 6.3.1
Sulfur Dioxide (SO <sub>2</sub> )	1.8 lbs/MMBTU of Heat Input	Section 7.1.1
Sulfur Dioxide (SO <sub>2</sub> )	1.2 lbs/MMBTU of Heat Input	NSPS – Subpart Db
Nitrogen Oxides (NO <sub>x</sub> )	0.5 lbs/MMBTU of Heat Input	NSPS – Subpart Db
Carbon Monoxide (CO)	NA	NA
Volatile Organic Compounds (VOC)	NA	NA

Pollution Control Device: None

Continuous Emission Monitors: CEMS

Continuous Compliance Determiner: Daily Recordkeeping of Fuels Combusted  
Maximum Heat Input Restricted to 200 MMBTU/hour  
Coke Oven Gas Restricted to 5,808.47 MMCF/year  
Coke Oven Gas Restricted to 5,808.47 MMCF/year for Boilers 1, 3, & 4  
Online  
Restricted to Coke Oven Gas/Natural Gas Combustion

Title V Monitoring: Monthly Visible Emissions Observation of Boiler Stack  
Daily Fuel Combustion Metering ( $\pm 1$  % accuracy)  
Monthly Sampling & Testing of Fuel Sulfur Content (COG)  
Monthly Sampling & Testing of Fuel Heat Content (COG)

EPA Reference Test Methods: 1, 2, 3, 4, 5, 6, 7 and 9 of 40 CFR 60, Appendix A

Reporting Requirements: See Section 5, and permit condition 3

Applicable Regulations: Sections 2.1.3, 6.1.1 and 7.1.1  
Parts 6.3 and 18.5  
Chapters 2, 6, 7, 13, 16 and 18  
40 CFR 60.40b

No.	Permit Conditions for Emissions Unit No. 032	Regulation
	<b>Section 1 – Applicability</b>	
1	<p><u>Applicability</u></p> <p>The Emissions Unit, 200 MMBTU/hour boiler, permitted herein shall include any equipment, device, or contrivance and all appurtenances thereto, including ducts, breechings, fuel-feeding equipment, ash removal equipment, combustion controls, stacks and chimneys, and the combustion fuels used. The emissions unit is subject to Part 6.1, entitled “Visible Emissions,” of the Rules and Regulations. The emissions unit is subject to a particulate emission rate under Part 6.3, entitled “Fuel Burning Equipment,” of the Rules and Regulations. The emissions unit is subject to Part 7.1, entitled “Fuel Combustion,” of the Rules and Regulations. The emissions unit is subject to Subpart Db of 40 <u>CFR</u> 60.40b. The emissions unit is subject to Chapter 2 new source review restrictions that restrict the amount of COG burned to avoid PSD applicability due to SOx emissions. If this Major Source Operating Permit expires (revoked or rescinded), the new source review permit limitations shall remain in effect at all times.</p>	<p>2.1.3 6.1 6.3 7.1 40 <u>CFR</u> 60.40b</p>
	<b>Section 2 -- Emission, Equipment or Production Requirements and Limitations</b>	
2	<p><u>Visible Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, “Visible Emissions Restrictions for Stationary Sources,” of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 <u>CFR</u> 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions (greater than 20% opacity) are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 48 hours of the observation. If this boiler is on reserve standby during the month that a visible emissions observation is required, the permittee shall document in its monthly records that a visible emissions observation was not performed and why it was not performed.</p>	<p>2.1.3 6.1.1 18.5</p>
3	<p><u>New Source Review Particulate Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to a particulate emission rate under Part 6.3 of the Rules and Regulations. The source permitted herein shall not exceed the mass particulate emissions rate of 25.2 pounds per hour. The permittee shall demonstrate compliance with this emission limit by certifying to the Department in writing that only coke oven gas and natural gas is combusted in the emissions unit. This written certification shall be submitted biennially.</p>	<p>2.1.3 6.3 18.5</p>
4	<p><u>Sulfur Oxides Emissions Restriction</u></p> <p>The Emissions Unit permitted herein is subject to and shall comply with the sulfur oxide emission rate restriction that is allowed under Section 7.1.1 of the Rules and Regulations. The permittee shall not cause or allow the emissions of sulfur oxides, measured as sulfur dioxide, from the fuel-burning equipment permitted herein in excess of 1.8 pounds per million BTU of heat input as determined by EPA Reference Method 6C of Appendix A of 40 <u>CFR</u> 60, July 1, 2008, as the same may be amended or revised. For Title V monitoring requirements, the permittee shall collect monthly samples of coke oven gas and analyze them for sulfur content by weight. The permittee shall also determine the heat content of each fuel sampled. The emissions unit is restricted to combusting coke oven gas and natural gas.</p>	<p>2.1.3 7.1 18.5</p>

<b>Section 2 -- Emission, Equipment or Production Requirements and Limitations</b>		
5	<u>NSPS Requirements</u> The Emissions Unit permitted herein is subject the New Source Performance Standards under 40 CFR 60.40b, Subpart Db.	13.2.2(b) 18.5 40 CFR 60.40b
6	<u>Subpart Db, Standard for Sulfur Dioxide (SO<sub>2</sub>) – Emission Limit</u> The permittee shall not discharge into the atmosphere any gases that contain SO <sub>2</sub> in excess of 1.2 lb/MMBtu heat input.	60.42b(d)(4)
7	<u>Subpart Db– SO<sub>2</sub>-Startup/Shutdown/Malfunction</u> The SO <sub>2</sub> emissions standard in 60.42b shall apply at all times, including periods of startup, shutdown or malfunction. The subpart allows for 30 operating days per calendar year for SO <sub>2</sub> control system maintenance. Steam Generator No. 4 does not have a sulfur dioxide control system. Therefore, this exemption or exception is not allowed.	60.45b(a)
8	<u>Subpart Db-NO<sub>x</sub>, - Emission Limit</u> The permittee shall not discharge into the atmosphere any gases that contain NO <sub>x</sub> in excess of 0.50 lbs NO <sub>x</sub> /MMBtu heat input.	60.44b(a)(3)(vi)
9	<u>Subpart Db-NO<sub>x</sub>, - Startup, Shutdown, Malfunction</u> The permittee's NO <sub>x</sub> emissions standard applies at all time including periods of startup, shutdown, and malfunctions.	60.44b(h)
10	<u>Subpart Db-Opacity Limit</u> No owner or operator that combust coal, oil, wood, or mixtures of these fuels with any other fuels shall cause to be discharged into the atmosphere any gases that exhibit greater than 20% opacity(6-minute average), except for one 6-minute period per hour of not more than 27% opacity.	60.43b(f)
11	<u>Subpart Db-Opacity, -Startup, Shutdown, Malfunction</u> The opacity limits apply at all times except during periods of startup, shutdown or malfunction.	60.43b(g)
12	<u>New Source Review Heat Input Restriction</u> The Emissions Unit permitted herein shall not exceed 200,000,000 BTUs per hour of heat input. This restriction shall be demonstrated by recording and maintaining a record of the amounts, within the fuel limits as shown in permit conditions 13 and 14, of this emissions unit for fuel combusted and time operated each calendar day.	2.1.3 18.5 40 CFR 60.40b
13	<u>New Source Review Combustion Fuel Restriction</u> The permittee shall not cause or allow the Emissions Unit No. 032 (Steam Generator No. 4) permitted herein in operation with any of the 2 remaining boilers to exceed 5,808.47 million (MM) cubic feet per year of coke oven gas in any 12-month period based on an annual rolling average as defined in Part 1.3 of the Rules and Regulations.	2.1.3 18.5 40 CFR 60.40b
14	<u>New Source Review Combustion Fuel Restriction</u> The Emissions Unit permitted herein is restricted to combusting coke oven gas/natural gas. This restriction shall be demonstrated by recording and maintaining a record of the amount of each fuel combusted each calendar day. The instrumentation for recording fuel usage shall be within ± 1% accuracy.	2.1.3 18.5 40 CFR 60.40b
<b>Section 3 -- Compliance and Performance Test Methods and Procedures</b>		
15	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the particulate emissions, sulfur oxide emissions, and visible emissions restrictions of this permit by the following EPA's reference methods under 40 CFR 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 1: Sample and Velocity Traverses Method 2: Determination of Stack Gas Velocity and Volumetric Flow Rate Method 3: Gas Analysis for Carbon Monoxide, Oxygen, Excess Air, and Dry M. W. Method 4: Determination of Moisture Content in Stack Gases Method 5: Determination of Particulate Emissions Method 6C: Determination of Sulfur Dioxide Emissions Method 7C: Determination of Nitrogen Oxide Emissions Method 9: Visual Determination of the Opacity of Emissions	Regulation 2.1.3 40 CFR 60

	Tutwiler Method: Sulfur Content (H <sub>2</sub> S) in Gas Mixtures Calorimeter: Determination of Heat Content of Fuels in BTU per Cubic Foot	
16	<u>Subpart Db-SO<sub>2</sub>, Initial Performance Testing</u> The initial performance test under the subpart shall be conducted over 30 consecutive operating days of the steam generating unit. The first operating day included in the performance test shall be scheduled within 30 days after achieving the maximum production rate. The boiler load during the 30-day period does not have to be the maximum design load, but must be representative of future operating conditions and include at least one 24-hour period at full load.	60.45b(c)(1) 60.45b(f)
17	<u>Subpart Db-SO<sub>2</sub>, Testing Methods &amp; Formulas</u> The SO <sub>2</sub> fuel based limit under 60.42b shall be verified by procedures in Method 19 of Appendix A-7 of 40 CFR 60, and under 60.45b. The hourly SO <sub>2</sub> emission rate and the 30-day average emission rate are obtained from the continuous emission monitoring system (CEMS) under 60.47b.	60.45b(c)(3), (4), & (5)
18	<u>Subpart Db-SO<sub>2</sub>, Daily Performance Testing</u> A separate performance test is completed at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate is calculated as describe in 60.45b(g).	60.45b(g)
19	<u>Subpart Db-SO<sub>2</sub>, Daily Performance Testing</u> All valid emissions data shall be included, including data collected during periods of startup, shutdown, and malfunctions.	60.45b(h)
20	<u>Subpart Db-NO<sub>x</sub>, Initial Performance Testing</u> For the initial performance test, NO <sub>x</sub> from the steam generating unit are monitored for 30 successive steam generating unit operating days and the 30-day average emission rate is used to determine compliance with the NO <sub>x</sub> emission standards under 60.44b.	60.46b(e)(1)
21	<u>Subpart Db-NO<sub>x</sub>, Testing Methods</u> To determine compliance with the emissions limits for NO <sub>x</sub> , the permittee shall conduct the performance test as required under 60.8 using the continuous system for monitoring NO <sub>x</sub> under 60.48b.	60.46b(c)
22	<u>Subpart Db-NO<sub>x</sub>, Daily Performance Testing</u> To determine compliance with the NO <sub>x</sub> emissions standard, the permittee shall conduct a separate performance test at the end of each steam generating unit operating day after the initial performance test, and a new 30-day average emission rate is calculated as the average of all hourly NO <sub>x</sub> emissions data for the proceeding 30 steam generating unit operating days.	60.46b(e)(2)
23	<u>Subpart Db-Opacity, -Testing Methods and Formulas</u> To determine compliance with the opacity limits, the permittee shall conduct an initial performance test and subsequent performance tests as requested by the Administrator using procedures and reference methods under 60.46b	60.46b
<b>Section 4 – Continuous Emission Monitoring</b>		
24	<u>Subpart Db-SO<sub>2</sub>, CEMS Requirements</u> The permittee shall install, calibrate, maintain, and operate a CEMS for SO <sub>2</sub> , and either O <sub>2</sub> or CO <sub>2</sub> and record the hourly/daily output.	60.47b(a)
25	<u>Subpart Db-SO<sub>2</sub>, Installation, Evaluation, and Operation of CEMS</u> The 1-hour average SO <sub>2</sub> emission rates as measured by the CEMS required by 60.47b and 60.13(h) shall be expressed in lb/MMBtu heat input and is used to calculate the average emission rate under 60.42(b). The hourly average shall be calculated according to 60.13(h)(2). The procedures under 60.13 shall be followed for the installation, evaluation, and operation of the CEMS.	60.47b(a) & (d)



26	<p><u>Subpart Db-SO<sub>2</sub>, Minimum CEMS Data Requirement</u></p> <p>The permittee shall obtain emission data for at least 75% of the operating hours in at least 22 out of 30 successive boiler operating days; if a single monitoring system is inadequate, the permittee must use additional methods as describe in 60.47b(c).</p> <p>Each 1-hour average SO<sub>2</sub> emission rate must be calculated according to 60.13(h)(2) and shall be based on 30 or more minutes of steam generating unit operation (hourly emission rate is not calculated if less than 30 minutes of generation takes place in 1 hour).</p>	60.47b(c) 60.47b(d)
27	<p><u>Subpart Db-SO<sub>2</sub>, CEMS Data Accuracy Assessment Procedures</u></p> <p>Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with Procedure 1 of appendix F of Part 60.</p>	60.47b
28	<p><u>Subpart Db-SO<sub>2</sub>, Alternate to CEMS Requirement</u></p> <p>A. The permittee shall collect coke oven gas samples in as-fired condition at the inlet to the steam generating unit and analyze for sulfur and heat content according to Method 19 of Appendix A-7 of 40 <u>CFR</u> 60.</p> <p>B. Site specific fuel analysis plan is required to be approved by the Administrator; minimum initial testing frequency is weekly but monthly or quarterly may be approved on petition; analysis must include the ratio of different fuels used in the mixture, potential sulfur emission rate (based on heat input), method used to determine sulfur content for each constituent (natural gas may use information on receipt).</p>	60.47b(b) 60.49b(r)(2)
29	<p><u>Subpart Db-NO<sub>x</sub>, CEMS Requirement</u></p> <p>The permittee shall install, calibrate, maintain and operate CEMS for NO<sub>x</sub> and either O<sub>2</sub> or CO<sub>2</sub>; record the output of the system. If the permittee has installed a NO<sub>x</sub> emission rate CEMS to meet part 75, the permittee shall follow the alternate procedures under part 75.</p>	60.48b(b)
30	<p><u>Subpart Db-NO<sub>x</sub>, Installation, Evaluation, and Operation of CEMS</u></p> <p>The permittee's steam generating unit shall follow the monitoring procedures under 60.13 regarding the installation, evaluation, and operations of the continuous monitoring system.</p>	60.48b(e)
31	<p><u>Subpart Db-NO<sub>x</sub>, Minimum CEMS Data Requirements</u></p> <p>A. The CEMS required under 60.48b shall be operated and data recorded during all periods of operation of the affected facility except for CEMS breakdowns and repairs. Data is recorded during calibration checks, and zero and span adjustments.</p> <p>B. Each 1-hour average NO<sub>x</sub> emission rate must be calculated according to 60.13(h)(2) and expressed as lbs/MMBtu.</p> <p>C. Obtain emission data for at least 75% of the operating hours in at least 22 out of 30 successive boiler operating days; if a single CEMS is inadequate or in case of breakdown, additional methods must be used.</p>	60.48b(c) 60.48b(d) 60.48b(f)
32	<p><u>Subpart Db-NO<sub>x</sub>, Alternate to CEMS Requirement</u></p> <p>The permittee's steam generating unit does not have a capacity factor restriction. The permittee must declares it intent to be restricted to a particular capacity factor for the consideration of an applied capacity factor. The permittee has not requested one. When a facility does not have a declared or applied capacity factor; then for any fuel the capacity factor is unrestricted (i.e. 100%). Therefore, if the boiler maintains a capacity factor greater than 10% for that fuel, then the subpart allows for and alternate method through parametric monitoring or predictive monitoring. In order to demonstrate compliance with parametric monitoring, boiler No. 4 which is subject to the NO<sub>x</sub> standard under 60.44b, will be required to submit a request to the Administrator for approval of a plan that identifies the operating conditions to be monitored under 60.48b(g)(2), and the records to be maintained under 60.49b(j). Otherwise a CEMS for NO<sub>x</sub> is required.</p>	60.48b(g)

33	<u>Subpart Db-Opacity, CEMS Requirement</u> The permittee shall install, calibrate, maintain, and operate a CEMS for measuring the opacity of emissions discharged to the atmosphere and record the output of the system.	60.48b(a)
34	<u>Subpart Db-Opacity, CEMS Exemption</u> The owner or operator meeting the following condition of 60.48b is not required to install or operate a COMS for opacity if:  The affected facility burns only gaseous fuels or fuel oils that contain less than or equal to 0.30 weight percent sulfur and operated according to a written site-specific monitoring plan approved by the appropriate delegated permitted authority. This monitoring plan must include procedures and criteria for establishing and monitoring specific parameters for the affected facility indicative of compliance with the opacity standard.	60.48b(j)(6)
<b>Section 5 -- Recordkeeping and Reporting Requirements</b>		
35	<u>Subpart Db-SO<sub>2</sub>, Reports/Records</u> A. The permittee of each affected facility subject to SO <sub>2</sub> emission limits under 60.42b shall submit to the Administrator the performance test data from the initial performance test and the performance evaluation of the CEMS using the applicable performance specification in appendix B. B. The owner or operator of each affected facility shall submit notification of the date of initial startup, as provided by 60.7. This notification shall include: <ol style="list-style-type: none"> <li>1. The design heat input capacity of the affected facility and identification of the fuels to be combusted in the affected facility.</li> <li>2. If applicable, a copy of any federally enforceable requirements that limits the annual capacity factor for any fuel mixture.</li> <li>3. The annual capacity factor at which the owner or operator anticipates operating the facility based on all fuels fired and based on each individual fuel fired.</li> </ol> C. The owner or operator shall record and maintain records of the amounts of each fuel combusted during each day and calculate the annual capacity factor, if applicable. D. The owner or operator of any affected facility subject to the SO <sub>2</sub> standards under 60.42b shall submit reports to the Administrator of compliance and performance test as follows: <ol style="list-style-type: none"> <li>1. Calendar dates covered in the reporting period;</li> <li>2. Each 30-day average SO<sub>2</sub> emission rate (lb/MMBtu) measured during the reporting period, ending with the last 30-day period; reason for noncompliance with the emission standards; and a description of corrective actions taken;</li> <li>3. Identification of the steam generating unit operating days that coal or oil was combusted and for which SO<sub>2</sub> diluent (O<sub>2</sub> or CO<sub>2</sub>) data have not been obtained by an approved method for at least 75% of the operating hours in the steam generating unit operating day; justification for not obtaining sufficient data; and description of corrective action taken;</li> <li>4. Identification of the times when emissions data have been excluded from the calculation of average emission rates; justification for excluding data; and description of corrective action taken if data have been excluded for periods other than those during which coal was not combusted in the steam generating unit;</li> <li>5. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;</li> <li>6. Identification of times when hourly averages have been obtained based on manual sampling methods;</li> <li>7. Identification of the times when the pollutant concentration exceeded full span of the CEMS;</li> <li>9. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with Performance Specification 2 or 3;</li> </ol>	60.49b

	and 10. Results of daily CEMS drift tests and quarterly accuracy assessments as required by appendix F, Procedure 1 of this part.	
36	<p><u>Subpart Db-NOx, Reports/Records</u></p> <p>The permittee subject to the NOx standard under 60.44b shall maintain records of the following information for each steam generating unit operating day:</p> <ol style="list-style-type: none"> <li>1. Calendar date;</li> <li>2. The average hourly NOx emission rates (expressed as NO<sub>2</sub>, lb/MMBtu heat input) measured or predicted;</li> <li>3. The 30-day average NOx emission rates (expressed as NO<sub>2</sub>, lb/MMBtu heat input) calculated at the end of each steam generating unit operating day from the measured or predicted hourly nitrogen oxide emission rates for the preceeding 30 steam generating unit operating days;</li> <li>4. Identification of the steam generating unit operating days when the calculated 30-day average NOx emission rate are in excess of the NOx emissions standards under 60.44b, with the reasons for such excess emissions as well as a description of corrective actions taken;</li> <li>5. Identification of the steam generating unit operating days for which pollutant data have not been obtained, including reasons for not obtaining sufficient data and a description of corrective actions taken;</li> <li>6. Identification of the times when emission data have been excluded from the calculation of average emission rates and the reason for excluding data;</li> <li>7. Identification of "F" factor used for calculations, method of determination, and type of fuel combusted;</li> <li>8. Identification of the times when the pollutant concentration exceeded full span of the CEMS;</li> <li>9. Description of any modifications to the CEMS that could affect the ability of the CEMS to comply with performance Specification 2 or 3; and</li> <li>10. Results of daily CEMS drift tests and quarterly accuracy assessments as required under Appendix F, Procedure 1 of this part.</li> </ol> <p>The permittee is required to submit excess emission reports for any excess emissions that occurred during the reporting period. For the purposes of 60.48b(g)(1), excess emissions are defined as any calculated 30-day rolling average NOx emission rate, as determined under 60.46b(e), that exceeds the applicable emission limits in 60.44b. Reports of NOx emissions are to be submitted to the Administrator.</p>	60.49b
37	<p><u>Subpart Db-Opacity, Reporting and Recordkeeping</u></p> <p>The permittee's steam generating unit is subject to the opacity standard under 60.43b. Accordingly the owner or operator shall maintain records of opacity.</p>	60.49b(f)
38	<p><u>Subpart Db-Opacity, Excess Emissions Report</u></p> <p>Any affected facility subject to the opacity standards under 60.43b(f) or to the operating parameter monitoring requirements under 60.13(i)(1) is required to submit excess emission reports for any excess emissions that occurred during the reporting period.</p>	60.43b(f) 60.13(i)(1)
39	<p><u>Subpart Db-Opacity, Quarterly Reporting</u></p> <p>The owner or operator of an affected facility may submit electronic quarterly reports in lieu of submitting the written reports required under paragraph (h), (i), (j), (k) or (l) under 60.49b.</p>	60.49b

40	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation. The record of operational hours shall differentiate combusting coke oven gas and natural gas; B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; C. The quantity of coke oven gas and natural gas burned in million cubic Feet; and D. The average monthly total sulfur content by weight and heat content of the cog.	1.5.15 2.1.3 18.5.3
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### Emissions Unit Operating Permit Summary

Emissions Unit No.: 034  
Company: Sloss Industries Corporation  
Source Description: 2 Each Primary Crushers With Wet Sprays and Wet Scrubber  
Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:  
Primary: N/A  
Secondary: N/A

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	36.00 lb/hr	Section 6.4.1

Pollution Control Device: Wet Spray/Wet Scrubber  
Continuous Emission Monitors: None  
Continuous Compliance Determiner: Work Practice Plan  
Title V Monitoring: Monthly  
EPA Reference Test Methods: 9 of 40 CFR 60, Appendix A  
Reporting Requirements: Annual  
Applicable Regulations: Section 1.5.15; Section 2.1.3; Part 6.1; Section 6.1.1; Part 6.2; Part 18.5  
Section 18.5.3; Chapter 18, 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 034	Regulation
	<b>Section 1 – Applicability</b>	
1	The emissions unit is subject to Part 6.1, entitled “Visible Emissions,” of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.2, entitled “Fugitive Dust” of the Rules and Regulations.	2.1.3 6.1 6.2 Chapter 18
	<b>Section 2 -- Emission, Equipment or Production Requirements and Limitations</b>	
2	<u>Visible Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, “Visible Emissions Restrictions for Stationary Sources,” of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 <u>CFR</u> 60. To comply with Title V emissions monitoring requirements, the permittee shall perform a visual observation of the emission unit's exhaust system and make a record of the visual observation at least once per month. If any visible emissions are observed, the permittee shall correct the problem causing the emission unit to emit visible emissions and make a record of the event and the corrective actions. The permittee shall make such repairs within 1 calendar month of the observation.	2.1.3 6.1.1 18.5
	<b>Section 3 -- Compliance and Performance Test Methods and Procedures</b>	
3	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 <u>CFR</u> 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 9: Visual Determination of the Opacity of Emissions Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares	2.1.3 40 <u>CFR</u> 60
	<b>Section 4 – Continuous Emission Monitoring – Not Applicable</b>	
	<b>Section 5 -- Recordkeeping and Reporting Requirements</b>	
4	<u>Wet Scrubber &amp; Wet Scrubber Availability</u> The installation and operation of the wet scrubber is in addition to the installation and operation of wet sprays. The wet scrubber can be considered a trial control device since the permittee has installed this device on its own volition and not necessitated by the Department. Currently this system malfunctions with use. The Department does require a work practice plan to be submitted by the permittee in the operation of this control device. The separate wet spray system is required until and when the performance of the wet scrubber is satisfactory as determined by this Department. If satisfactory performance is not achieved within 6 months of date of issuance of this permit the permittee may petition this Department for its removal. The operation of controls with water is not required below 38 degrees Fahrenheit. A log book of inactive days due to weather shall be maintained by the permittee and made available for review by the Department.	2.1.3
5	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation of the primary crusher; B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and C. The quantity of material processed through the crusher annually.	1.5.15 2.1.3 18.5.3

### Emissions Unit Operating Permit Summary

Emissions Unit No.: 035

Company: Sloss Industries Corporation

Source Description: Primary Wheel Wash With A Secondary Wheel Wash As Backup  
Operating Schedule: 24 hours/day, 7 days/week, and 52 weeks/year

Type and quantity of fuel used:

Primary: N/A

Secondary: N/A

Pollutants Emitted:

Pollutant	Regulatory Emission Limit	Applicable Standard
Visible Emissions (VE)	20 % Opacity	Section 6.1.1
Particulate Matter (PM)	None	N/A

Pollution Control Device: None

Continuous Emission Monitors: None

Continuous Compliance Determiner: None

Title V Monitoring: None

EPA Reference Test Methods: Methods 9 and 22 of 40 CFR 60, Appendix A

Reporting Requirements: Annual

Applicable Regulations: Section 1.5.15; Section 2.1.3; Part 6.1; Section 6.1.1; Part 6.2; Part 18.5  
Section 18.5.3; Chapter 18, 40 CFR 60

No.	Permit Conditions for Emissions Unit No. 035	Regulation
	<b>Section 1 – Applicability</b>	
1	The emissions unit is subject to Part 6.1, entitled “Visible Emissions,” of the Rules and Regulations. The emissions unit is subject to the particulate emission rate allowed under Part 6.2, entitled “Fugitive Dust” of the Rules and Regulations.	2.1.3 6.1 6.2 Chapter 18
	<b>Section 2 -- Emission, Equipment or Production Requirements and Limitations</b>	
2	<u>Visible Emissions Restriction</u> The Emissions Unit permitted herein is subject to and shall comply with the requirements under Section 6.1.1, “Visible Emissions Restrictions for Stationary Sources,” of the Rules and Regulations. The permittee shall not cause or allow the discharge into the atmosphere from the emissions unit permitted herein any air contaminant of an equivalent opacity greater than that designated as 20% opacity, as determined by a 6-minute average; except, during one 6-minute period in any 60-minute period, the permittee may discharge into the atmosphere any air contaminant of an equivalent opacity not greater than that designated as 40% opacity. Compliance with the opacity standard in this condition shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60.	2.1.3 6.1.1 18.5
3	<u>Maintenance and Malfunctioning of Equipment: Reporting</u> In the case of shutdown of air pollution control equipment for necessary scheduled maintenance, the intent to shutdown, unless such shutdown shall be reported to the Department at least 24 hours prior to the planned shutdown. The following shall be reported only if both wheel washers are to be placed out of service:  1. Identification of the specific facility taken out of service as well as its location and permit number; 2. The expected length of time that the air pollution control equipment will be out of Service; and 3. The nature and quantity of emissions of air contaminants likely to occur during the shutdown period.	1.12 Chapter 18
4	<u>Malfunction: Reporting</u> In the event that any emission source, air pollution control equipment or related facility fails or break down in such a manner as to cause the emission of air contaminants in violation of the Rules and Regulations, the person responsible for such source, equipment or facility shall notify the Department within 24 hours of such failure or breakdown and provide a statement giving all pertinent facts, including the estimate duration of the breakdown. The Department shall be notified when the condition causing the failure or breakdown has been corrected and such source, equipment or facility is again in operation.	1.12 Chapter 18
5	<u>Acceptable Times That The Wheel Wash is Out of Service</u> The permittee is not required to operate either wheel wash if the highest measured ambient temperature remains less than 38 degrees Fahrenheit throughout that day (24-hour period). When the measured ambient temperature rises to 38 degrees Fahrenheit or more during the day, the permittee shall resume daily wheel washing. The following records are to be maintained at the permittee’s facility. Records are only required to be kept during the calendar year when the wheel wash is down.  1. The permittee shall continuously record the ambient temperature on days that the wheel wash is out of service due to ambient conditions; and 2. A log book of acceptable out of service times is to be maintained and available for review by the Department	2.1.3 Chapter 18



	<b>Section 3 -- Compliance and Performance Test Methods and Procedures</b>	
6	<u>Test Methods and Procedures</u> The permittee shall determine compliance with the visible emissions restrictions of this permit by the following EPA's reference methods under 40 <u>CFR</u> 60, Appendix A, July 1, 2008, as the same may be amended or revised: Method 9: Visual Determination of the Opacity of Emissions Method 22: Visual Determination of Fugitive Emissions from Material Sources and Smoke Emissions from Flares	2.1.3 40 <u>CFR</u> 60
	<b>Section 4 -- Continuous Emission Monitoring -- Not Applicable</b>	
	<b>Section 5 -- Recordkeeping and Reporting Requirements</b>	
7	<u>Department Required Annual Report Requirement</u> The permittee shall submit by February 10th of each calendar year to this Department an annual summary report for the previous calendar year in a format approved by this Department of the following production information of the emissions unit permitted herein: A. The actual hours of operation of the wheel wash; B. The actual emissions (point and fugitive) of all regulated air pollutants as defined in Chapter 18 of the Rules and Regulations; and C. The number of days the wheel wash was not available due to ambient conditions.	1.5.15 2.1.3 18.5.3